thereof. The subthoracic vessels may also comprise at least one of a superior mesenteric artery, a left renal artery, an abdominal aorta, an inferior mesenteric artery, colic arteries, sigmoid arteries, a superior rectal artery, 5th lumbar arteries, a middle sacral artery, a superior gluteal artery, umbilical and superior vesical arteries, an obturator artery, an inferior vesical and artery to ductus deferens, a middle rectal artery, an internal pudendal artery, an inferior gluteal artery, a cremasteric, pubic (obturator anastomotic) branches of inferior epigastric artery, a left colic artery, rectal arteries, and/or branches thereof.

In some aspects, the lateral thoracic vessels may comprise at least one of humeral arteries, a transverse cervical artery, a suprascapular artery, a dorsal scapular artery, and/or branches thereof. The lateral thoracic vessels may also comprise at least one of an anterior circumflex humeral artery, a posterior circumflex humeral artery, a subscapular artery, a circumflex scapular artery, a brachial artery, a thoracodorsal artery, a lateral thoracic artery, an inferior thyroid artery, a thyrocervical trunk, a subclavian artery, a superior thoracic artery, a thoracoacromial artery, and/or branches thereof.

In some embodiments, a catheter, such as that described in U.S. patent application Ser. No. 12/731,110, which was filed on Mar. 24, 2010 and which incorporated herein by reference in its entirety, can be used to deliver an occluding device delivery system. The delivery system can include an expandable occluding device (e.g., stent) configured to be placed across an aneurysm that is delivered through the distal portion of the catheter, out a distal tip, and into the vasculature adjacent an aneurysm in the middle cerebral artery. A proximal portion of the catheter can remain partially or entirely within a guiding catheter during delivery, and an intermediate portion, taper portion, and distal portion of the catheter can extend distally of the guiding catheter. The occluding device can be released at the target location and can be used to occlude blood flow into the aneurysm. The catheter can be used to reach target locations (e.g., aneurysms) located elsewhere in the body as well, include but not limited to other arteries, branches, and blood vessels such as those described above.

The apparatus and methods discussed herein are not limited to the deployment and use of an occluding device within the vascular system but may include any number of further treatment applications. Other treatment sites may include areas or regions of the body such as organ bodies. Modification of each of the above-described apparatus and methods for carrying out the subject technology, and variations of aspects of the disclosure that are apparent to those of skill in the art are intended to be within the scope of the claims. Furthermore, no element, component or method step is intended to be dedicated to the public regardless of whether the element, component or method step is explicitly recited in the claims.

Although the detailed description contains many specifics, these should not be construed as limiting the scope of the subject technology but merely as illustrating different examples and aspects of the subject technology. It should be appreciated that the scope of the subject technology includes other embodiments not discussed in detail above. Various other modifications, changes and variations which will be apparent to those skilled in the art may be made in the arrangement, operation and details of the method and apparatus of the subject technology disclosed herein without departing from the spirit and scope of the subject technology as defined in the appended claims. Therefore, the scope of the subject technology should be determined by the appended claims and their legal equivalents. Furthermore, no element, component or method step is intended to be dedicated to the public regardless of whether the element, component or method step is explicitly recited in the claims. Underlined and/or italicized headings and subheadings are used for convenience only, do not limit the subject technology, and are not referred to in connection with the interpretation of the description of the subject technology. In the claims and description, unless otherwise expressed, reference to an element in the singular is not intended to mean "one and only one" unless explicitly stated, but rather is meant to mean "one or more." In addition, it is not necessary for a device or method to address every problem that is solvable by different embodiments of the disclosure in order to be encompassed by the claims.

What is claimed is:

1. A method of reducing blood flow within an aneurysm, the method comprising:

expanding a stent, from a delivery device, across the aneurysm, such that a stagnated area forms in the aneurysm;

injecting a contrast agent into a blood vessel comprising an aneurysm;

imaging the stagnated area forming a crescent shape, a mushroom shape, a hemispherical shape, and/or a flat side; and

while the stagnated area is in the crescent shape, withdrawing the delivery device from the vessel.

2. The method of claim **1**, wherein, after withdrawing the delivery device, substantially all of the aneurysm progressively thromboses.

3. The method of claim **1**, wherein the imaging is sufficient to determine that the expanding the stent is sufficient to lead to thrombosis of the aneurysm.

4. The method of claim **1**, wherein the imaging comprises imaging that the stagnated area fills less than 70% of a volume of the aneurysm.

5. The method of claim **1**, wherein the imaging comprises imaging that the stagnated area fills between about 20% and about 70% of a volume of the aneurysm.

6. The method of claim **1**, wherein the imaging comprises imaging that the stagnated area fills between about 50% and about 70% of a volume of the aneurysm.

7. The method of claim **1**, wherein the imaging comprises comparing a first image of the aneurysm before expanding the stent to a second image of the aneurysm after expanding the stent.

8. A method of reducing blood flow within an aneurysm, the method comprising:

expanding a stent, from a delivery device, across an aneurysm of a blood vessel, whereby a stagnated area forms into a crescent shape, a mushroom shape, a hemispherical shape, and/or a flat side in the aneurysm;

injecting a contrast agent into the blood vessel, at least a portion of the contrast agent flowing into the aneurysm; and

withdrawing the delivery device from the vessel upon imaging that the stagnated area forms the crescent shape, the mushroom shape, the hemispherical shape, and/or the flat side.

9. The method of claim **8**, wherein the imaging is sufficient to determine that the expanding the stent is sufficient to lead to thrombosis of the aneurysm.

10. The method of claim **8**, wherein the stagnated area fills less than 70% of a volume of the aneurysm when the delivery device is withdrawn from the vessel.

11. The method of claim **8**, wherein the stagnated area fills between about 20% and about 70% of a volume of the aneurysm when the delivery device is withdrawn from the vessel.